



PROGRESS REPORT NO. 120

TO: Laura Buelow, U.S. Environmental Protection Agency (EPA) – via Email
Dustan Bott, EPA – via Email

FROM: Kris McCaig – Teck American Incorporated (TAI)

DATE: July 9, 2016

FILE NO: 01-773180-000

RE: Upper Columbia River (UCR) Remedial Investigation/Feasibility Study
(RI/FS) - Progress Report No. 120 Month Ending June 2016

Pursuant to Paragraph 39 of the June 2, 2006 Settlement Agreement (Agreement), the following is intended to provide a summary of activities completed during the past month in compliance with the aforementioned Agreement. It is also intended to provide a brief summary of pending and on-going activities.

Phase 2 Sediment Study - Field sampling activities were completed on October 24, 2013, short-term bioassay tests (i.e., 10-day *Chironomus dilutes* and 28-day *Hyalella azteca*) were completed for all batches on April 24, 2014, long-term bioassay tests (i.e., *Chironomus dilutes* and 42-day *Hyalella azteca*) were completed for all batches on May 4, 2015, and backscatter electron microscopy (BSEM) analysis on selected samples was completed in May 2015. TAI delivered the draft data summary report (DSR) to EPA on December 18, 2015.

Chemicals of Potential Concern (COPC) Refinement Document – as required in “Resolution A” in the January 18, 2013 letter from EPA which detailed the resolution to the TAI’s dispute of EPA’s comments on the Phase 2 Sediment Study quality assurance project plan, TAI submitted the Draft COPC Refinement Document to EPA on March 31, 2015. TAI is in receipt of EPA comments dated October 7, 2015 and has reviewed and discussed the comments with EPA. It was agreed that TAI will respond to the comments and acknowledge the technical issues raised by EPA in future refinements but the COPC refinement document will remain draft for now.

Bossburg Flat Beach Refined Sediment and Soil Study – Field sampling activities were completed on May 8, 2015. Sediment and soil sample chemistry analyses and data validation are complete and validated data have been made available for EPA’s quality assurance review. TAI is in receipt of EPA letters documenting their quality assurance review for Parts 1 through 5 of the validated data and TAI responded to EPA’s review comments on October 5, 2015. The Bossburg Study Final Cultural Resources Monitoring

report was submitted to EPA on November 12, 2015. TAI received comments on the October 7, 2015 draft DSR from EPA on January 6, 2016 and had a call with EPA on January 29, 2016 to get clarification on some of the comments. TAI submitted the draft final DSR (red line strike-out version) and response to EPA's January 6, 2016 comments on March 22, 2016.

Benthic Macroinvertebrate Tissue Study – EPA granted approval of the Final QAPP in a letter to TAI on April 14, 2016. All required permits were obtained by TAI and their field contractor, AECOM, and kick-off meeting was held in Spokane, WA on April 25, 2016. Field sampling commenced on April 26, 2016 and was completed on May 19, 2016. TAI submitted draft preliminary field data and maps to EPA on June 3, 2016 and a draft sample compositing plan to EPA on June 8, 2016. TAI held a conference call with EPA June 9, 2016 to give an overview of the compositing plan and to answer any preliminary questions. At the time of writing, EPA provided partial comments on the compositing plan to TAI on July 1, 2016.

Human Health – TAI received from EPA, the draft data analysis report (DAR) for the Recreational Use Survey on January 17, 2014 and submitted comments to EPA on June 11, 2014. TAI received from EPA, a November 23, 2015 Memorandum written by SRC titled "Recreation Use Survey Fish Ingestion Rate" and is reviewing and evaluating to provide comments. It is important to note that SRC's memorandum references the following version of the DAR for the recreational use survey: "SRC, Inc. (2014). Data analysis report for the recreational use survey for the Upper Columbia River Site human health risk assessment and remedial investigation/feasibility study. Prepared under contract for the Environmental Protection Agency. January 16." As noted above, TAI submitted comments to EPA on the January 2014 DAR version on June 11, 2014. EPA circulated the Draft Final DAR for review by TAI and the Participating Parties on April 15, 2016 and TAI submitted comments to EPA on June 10, 2016.

2016 Residential Soil Sampling – The 2016 residential soil study is underway based on EPA's August 11, 2015 directive letter to TAI to conduct the residential soil sampling in 2016. Upon EPA's approval of the access agreement letter and attachments, TAI mailed letters to 506 property owners on January 11, 2016. A second round of letters were mailed out on March 4, 2016 to landowners who have not responded to the initial letter request and on March 6, 2016 letters were mailed to sixty landowners in the Marble area who did not receive letters during the first mailing in January. TAI worked with EPA to respond to landowner questions and track responses, and coordinated with The Confederated Tribes of the Colville Reservation to provide information they needed to obtain access permission for reconnaissance and sampling at tribal allotments within the 2016 sampling area. EPA approved the Final Field Reconnaissance Plan on April 12, 2016, a kick-off meeting was held in Spokane, WA on April 25, 2016, field reconnaissance work commenced on April 26, 2016 and was completed on May 18, 2016. TAI and its contractors compiled the field reconnaissance data and a meeting was held on June 2, 2016 to review the information with EPA. TAI submitted the draft final QAPP Addendum No. 1 to EPA on June 17, 2016 (including the table and maps with

field reconnaissance information for residences and decision units) for review and comment.

White Sturgeon Sediment Toxicity Study – In January 2014 TAI submitted to EPA, the draft final version of the Assessment of Sediment Toxicity to White Sturgeon DSR and response to EPA’s comments. On August 10, 2015 TAI met with EPA to discuss the draft final DSR and TAI’s response to comments and clarify further changes needed in order to revise the DSR. TAI submitted a revised DSR and revised response to comments to EPA on November 20, 2015.

Soil Amendment Technologies Evaluation Study – TAI is received a letter from EPA on June 21, 2016 regarding approach for conducting the evaluation study and proposed that EPA perform the treatability study with Teck’s funding. At the time of writing TAI responded to EPA’s letter on July 6, 2016 in agreement that a treatability study should be done, but is disagreeing that EPA needs to be in the lead.

Baseline Ecological Risk Assessment (BERA) – In August 2015 TAI provided draft straw man approaches for development of toxicity reference values (TRVs) for wildlife, sediment and porewater, and soil which served to initiate discussions between TAI, EPA and the participating parties (PPs). TAI received two comment letters on December 18, 2015 which detailed EPA and PP Workgroup comments on the approaches. TAI evaluated the comments and provided requested information prior to the TRV development meetings held on January 20 and 21, 2016 in Seattle, WA. During the meetings TAI presented information focused on addressing comments from EPA and the PPs, and had time for discussion between technical team members of each group. Information from the meeting (e.g., sign-in sheets, agendas, presentations, etc.) has been posted on the secure side of the project website www.ucr-rifs.com and more will be posted as it becomes available (e.g., draft meeting notes, technical papers, etc.). TAI submitted draft meeting notes to EPA on February 9, 2016 for review and approval. On June 17, 2016 EPA submitted a letter to TAI “Upper Columbia River Baseline Ecological Risk Assessment TRV Development Follow Up.” TAI is evaluating the letter and will continue to work with EPA on actions items outlined in the letter.

Should you have any questions or require any additional information, please do not hesitate to contact me at 509-623-4501.